

# Notice of Allowability

Application No.

10/607,670

Examiner

Cynthia L Davis

Applicant(s)

HEIKKILA ET AL.

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## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to communications filed on 2/28/2005.
2. ☒ The allowed claim(s) is/are 1-24.
3. ☒ The drawings filed on 6/27/2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.


Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
HUY D. VU  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600

## DETAILED ACTION

### *Allowable Subject Matter*

1. Claims 1-24 allowed. The following is an examiner's statement of reasons for allowance.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

2. The following is a statement of reasons for allowance. In claim 1, the limitation:  
...said whitening filter system comprising  $N_s N_{rx}$  parallel individual whitening filters with individual whitening filters  $W_{jk}$ , receiving, during each symbol interval  $I$ ,  $N_s N_{rx}$  new signal samples via a signal connection matrix such that a first individual whitening filter receives one of the new samples, a second individual whitening filter receives the same new sample as the first individual whitening filter, and one additional new sample, and such that an  $n$ th individual whitening filter receives the same  $a-1$  new samples as the first  $n-1$  individual whitening filters, plus one additional new sample...

is not present in the prior art.

3. In claim 8, the limitation:  
...whitening uses a whitening filter system comprising  $N_s N_{rx}$  parallel individual whitening filters  $w(j,k)$ , individual whitening filters  $w(j,k)$  receiving during each symbol interval  $i$ ,  $N_s N_{rx}$  new signal samples via a signal connection matrix such

that a first individual whitening filter receives only one of the new samples, a second individual whitening filter receives the same sample as the first individual whitening filter, and one additional sample, and such that an  $n$ th individual whitening filter receives the same  $n-1$  samples as the first  $n-1$  individual whitening filters, plus one of the remaining samples...

is not present in the prior art.

4. In claim 15, the limitation:

...said whitening filter system comprising  $N_s N_{rx}$  parallel individual whitening filters  $w(j,k)$ , individual whitening filters  $w(j,k)$  receiving, during each symbol interval  $I$ ,  $N_s N_{rx}$  new signal samples via a signal connection matrix such that a first individual whitening filter receives one of the new samples, a second individual whitening filter receives the same new sample as the first individual whitening filter, and one additional new sample, and such that an  $n$ th individual whitening filter receives the same  $n-1$  new samples as the first  $n-1$  individual whitening filters, plus one additional new sample...

is not present in the prior art.

5. In claim 20, the limitation:

...said whitening filter means comprising  $N_s N_{rx}$  parallel individual whitening filters  $w(j,k)$ , individual whitening filters  $w(j,k)$  receiving, during each symbol interval  $I$ ,  $N_s N_{rx}$  new signal samples such that a first individual whitening filter receives one of the new samples, a second individual whitening filter receives the same new sample as the first individual whitening filter, and one additional new

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sample, and such that an  $n$ th individual whitening filter receives the same  $n-1$  new samples as the first  $n-1$  individual whitening filters, plus one additional new sample...

is not present in the prior art.

6. In claim 23, the limitation:

...whitening uses a whitening filter system comprising  $N_s N_{rx}$  parallel individual whitening filters  $w(j,k)$ , individual whitening filters  $w(j,k)$  receiving during each symbol interval  $i$ ,  $N_s N_{rx}$  new signal samples such that a first individual whitening filter receives only one of the new samples, a second individual whitening filter receives the same sample as the first individual whitening filter, and one additional sample, and such that an  $n$ th individual whitening filter receives the same  $n-1$  samples as the first  $n-1$  individual whitening filters, plus one of the remaining samples...

is not present in the prior art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia L Davis whose telephone number is (571) 272-3117. The examiner can normally be reached on 8:30 to 6, Monday to Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CLD

4/20/2005

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